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Self-diagnosis method of setting members in controller -
making plausibility comparison between setting member and measured change
and stored values

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Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 170018	A	19860205	EP 85107387	A	19850614	198606 B
DE 3435465	A	19860213	DE 3435465	A	19840927	198608
BR 8503654	A	19860506				198623
US 4601199	A	19860722	US 85754514	A	19850711	198632
EP 170018	B	19901003				199040
DE 3579972	G	19901108				199046

Priority Applications (No Type Date): DE 3435465 A 19840927; DE 3428620 A
19840803

Cited Patents: A3...8812; DE 2846804; GB 2102165; No-SR.Pub; US 4200064; US
4348727; US 4414950; JP 57186038

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
EP 170018	A	G	19	

Designated States (Regional): DE FR GB

EP 170018 B

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Abstract (Basic): EP 170018 B

The method involves causing or observing an (arbitrary) adjustment
of a setting member and simultaneously detecting the change in a
variable indirectly dependent on this member. A plausibility comparison
is then made between the present member and the measured change and
stored values.

The measurement may be the signal from an inlet-tube air-flow
sensor produced for fuel injection commands. The diagnosis is
undertaken under certain operating conditions. (19pp Dwg.No.1/2)

Abstract (Equivalent): EP 170018 B

Method for checking the functional capability of an actuator,
influencing the air supply to an internal combustion engine of a motor
vehicle, of an open-loop or closed-loop control system controlling the
air supply to the internal combustion engine, in which method a change
in the electrical control value driving the actuator and a change,
associated with the control value change, of a load measurement value
are detected and the control value change in this measurement value
change is compared with stored values and checked for plausibility, the
stored values and checked is compared with stored values containing a
correlation of the control value change to the measurement value change
associated with this control value change, the control value change
being carried out when certain operating conditions occur.

(10pp)

Abstract (Equivalent): US 4601199 A

Self-diagnosis is performed at certain conditions at which a regulating path governed by a subsystem pertaining to an idling speed air charge adjuster for an IC engine does not react to a change of the latter. Plausibility of control signals for the adjuster is compared with a second control signal from another regulating subsystem. Both signals are compared with a known, previously determined relation, which is stored in a memory.

Correlation between adjuster variation and measured signals is made during overrun or engine braking at a thrust disconnection or cut-off above a predetermined rotary speed threshold. A load signal is derived from the measurement of pressure, air flow or air mass in an air intake manifold of an electronic fuel injection system.

ADVANTAGE - Diagnosis and comparison operations may be performed by same microprocessor. (7pp)-

Title Terms: SELF; DIAGNOSE; METHOD; SET; MEMBER; CONTROL; COMPARE; SET; MEMBER; MEASURE; CHANGE; STORAGE; VALUE

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